WE CLAIM:

1. A method for selecting a communication system to be used by a mobile unit to conduct a data session, the method comprising:

a) determining a set of valid communication systems available to the mobile unit, the set of valid communication systems including at least two disparate types of communication systems;

b) selecting a communication system from the set of valid communication systems.

2. The method of claim 1, wherein

the step a) determines the set of available communication systems to include an actively connected wireline communication system and at least one wireless communication system.

3. The method of claim 2, wherein

the at least one wireless communication system includes a serving wireless communication system, and

the step b) selects the actively connected wireline communication system.

4. The method of claim 1, wherein each communication system in the set of valid communication systems is a wireless communication system.

5. The method of claim 4, wherein

the method is performed while a wireline communication system is currently serving the mobile unit, and

the method further including,

c) performing a hand-off of the mobile unit from the serving wireline communication system to the selected communication system upon detection that the mobile unit is no longer actively connected to the serving wireline communication system.

6. The method of claim 4, wherein the at least two disparate types of communication systems include at least two of: a 3G-based network, a wireless local area network (WLAN), and a personal area network (PAN).

7. The method of claim 4, wherein the step b) selects the communication system based on at least one of an available bit rate, a received signal strength, an access cost and a measured system performance parameter corresponding to each valid wireless communication system.

8. The method of claim 4, wherein the step b) selects the communication system based on at least one preference rule defined by a primary service provider of the mobile unit.

9.   The method of claim 4, wherein the step b) selects the communication system based on at least one preference rule defined by a user of the mobile unit.

10.   The method of claim 9, wherein the at least one preference rule is a cost based preference rule.

11. The method of claim 10, wherein the step b) automatically performs selection based on the cost based preference rule.

12. The method of claim 11, wherein the step b) receives user input authorizing a selection based on the cost based preference rule.

13. The method of claim 10, wherein the at least one preference rule prevents selection of valid communication systems.

14. The method of claim 13, wherein the at least one preference rule prevents selection of valid communication systems based on cost.

15.   The method of claim 4, wherein

the method is performed while the mobile unit is conducting the data session using a serving wireless communication system, the serving wireless communication system being in the set of valid communication systems, and

the method further including,

c) performing a hand-off of the mobile unit from the serving wireless communication system to the selected communication system such that dual active interfaces are maintained with the serving and selected systems prior to disconnecting from the serving wireless communication system, if the step b) does not select the serving wireless communication system.

16. The method of claim 15, wherein

the serving wireless communication system is disparate from the selected communication system, and wherein

the step c) maintains the data session while performing the hand-off of the mobile unit.

17. The method of claim 15, wherein the step b) includes,

b1) assigning a score to each respective communication system in the set of valid communication systems;

b2) determining a candidate system for each of the at least two disparate types of communication systems, the candidate system being determined from the set of valid communication systems based on the assigned scores; and

b3) applying at least one preference rule to the assigned scores of the candidate systems determined in the step b2) to obtain the selected communication system.

18. The method of claim 17, wherein the step b1) assigns the score to the respective communication system based on at least one of an available bit rate, a received signal strength, an access cost and a measured system performance parameter.

19. The method of claim 17, wherein

the set of valid communication systems includes at least one IEEE 802.11-based network and at least one 3G-based network,

the step b1) assigns the score to the respective wireless communication systems based on an available bit rate, the step b1) determining the available bit rate for the at least one IEEE 802.11-based network based on a signal-to-noise ratio (SNR) measured by the mobile unit, and the step b1) determining the available bit rate for the at least one 3G-based network based on at least one of a measured pilot signal-to-interference (E_c/I_o) and a received data rate field.

20. The method of claim 17, wherein

the determined candidate systems include the serving wireless communication system, and wherein

the step b3) includes,

b3-1) applying the at least one preference rule to the score of each candidate system to choose a preferred candidate system,

b3-2) selecting the serving wireless communication system if the serving wireless communication system is the preferred candidate system, and

b3-3) applying a set of thresholds to the signal of the preferred candidate system to determine whether to select the preferred candidate system if the serving wireless communication system is not a preferred candidate system, the set of thresholds including a high watermark and a low watermark.

21. The method of claim 17, wherein the step b3) includes applying at least one preference rule defined by a primary service provider of the mobile unit.

22. The method of claim 17, wherein the step b3) includes applying at least one preference rule defined by a user of the mobile unit.

23. The method of claim 22, wherein the at least one preference rule is a cost based preference rule.

24. The method of claim 23, wherein the step b) automatically performs selection based on the cost based preference rule.

25. The method of claim 23, wherein the step b) receives user input authorizing a selection based on the cost based preference rule.

26. The method of claim 22, wherein the at least one preference rule prevents selection of valid communication systems.

27. The method of claim 26, wherein the at least one preference rule prevents selection of valid communication systems based on cost.

28. The method of claim 15, further comprising

receiving an indication at the mobile unit that the serving wireless communication system cannot maintain the data session at a specified service level, and wherein

the mobile unit performs the steps a) - c) to hand-off the mobile unit to a wireless communication system capable of maintaining the data session at the specified service level.

29. The method of claim 15, wherein the step a) includes,

a1) scanning an environment to detect at least one available wireless communication system, the scanning being performed continuously or at predefined time intervals; and

upon detection of the at least one available wireless communication system in the step a1),

a2) determining whether each detected, available wireless communication system detected in the step a1) is valid; and

a3) establishing the set of valid communication systems, the set of valid communication systems including the serving wireless communication system and each detected, available wireless communication system determined to be valid by the step a2).

30. The method of claim 1, wherein the step b) one of automatically performs the selection and requests and receives user input authorizing the selection.